

CHRISTIANSEN et al. - Application No. 09/097,383

Claims 1-26 are currently pending in the application. Claims 6 and 10-18 have been withdrawn from further consideration. Claims 4, 16, 17 and 26 have been cancelled without prejudice or disclaimer.

Claims 1-5, 7-9 and 19-26 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite.

Claim 1 has been rewritten to recite further structure and to address the Examiner's concerns regarding the connection between the claimed elements. However, in approaching the question of the connection between the claimed elements in regard to the present invention it should be borne in mind that the apparatus of the present invention is concerned with an optical system in which there is no necessary physical connection between the different elements, such as the light source and a filter interposed between the light source and a target for the light. What is important in apparatus of this kind is that there should be a light path connecting these elements, thus establishing an operational connection between the elements. The physical means of support of the different elements is not directly relevant and they need not be physically connected to one another in order to achieve the desired functionality.

The limitations of now cancelled claim 4 have been incorporated into the invention as defined by amended claim 1. Claim 7 has been amended to specify that the filter is positioned in a light path from the light source, thereby providing an operational connection between the elements of the invention and satisfying the connection requirement.

Claim 19 has been amended to positively state that the filter has light filtration characteristics such that it passes only selected wavelengths of light thereby overcoming the objection to the term "adapted to". The requirement that the elements of claim 19 show the

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requisite connection is met by the claim language which requires that the filter be disposed in a light path from the light source. Applicants respectfully submit that the operational connection of the filter being disposed in the light path fully meets the requirement of connection of all elements. The apparatus could function perfectly well with both the light source and the filter being mounted separately on stands on the ground provided that the necessary light path is present and thereby operationally connecting them one to the other.

Claim 24 has been amended to depend from claim 13 and by that amendment provides the necessary antecedent basis for the term "the power supply" in claim 24.

Responsive to the objection to the drawings for not showing a "means for producing a flow of water", the Applicants herein have provided a requested amendment to the drawings; specifically Figure 3, which clearly shows a "water supply" below the water inflow and outflow arrows labeled "38" and "40", respectively in Figure 3. The amendment to the drawing is fully supported by the specification and claims as originally filed, particularly at page 4, lines 23-27; page 14, line 27 through page 15, line 27 and claims 2, 3, 7 and 8. The amendment to the drawing satisfies the Examiner's objection and does not constitute new matter. No new matter has been added.

The amendment to Figure 3 also obviates the objection regarding the lack of illustration of a "means for passing liquid through said flow path" as defined in claim 7 and the objection regarding not showing "the flow path showing a closed circuit around which the liquid circulates" as defined in claim 8.

With regard to the objection related to the elements of claim 24, particularly the contention that the drawings do not show "the power supply comprising a capacitor, resistor and switch", the Applicants respectfully point out that these elements are clearly shown in

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Figure 1, which includes power supply 12 with capacitor C and resistor R and solid state switch IGBT.

While claim 26 is herein cancelled, for completeness, the Applicants respectfully point out that the means for focusing light output at a selected depth below the surface of the treatment location is clearly shown in Figure 11 as the concave ended light guide 60.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Hughes (U.S. Patent 4,876,694). The Applicants respectfully traverse the rejection.

Hughes does not describe an apparatus for producing a pulse of light for use in cosmetic or therapeutic photo treatment of the human or animal body. In Hughes, the water is present as a cooling medium which surrounds a flash tube 6. It is not disclosed that the flash tube 6 provides an energy level of at least $250 \text{ J/cm}^2/\text{sec}$. The purpose of the flash tube is not to provide a pulse of light of sufficient intensity for cosmetic or therapeutic photo treatment and therefore there is no reason for supposing that it might inherently meet the required power level of the Applicants' invention. In the Hughes disclosure there is no intention or suggestion to filter out undesired skin heating wavelengths of light by means of the water. In the disclosure of Hughes, water is disclosed only as a cooling medium without any suggestion of use as a filter.

Further, the apparatus in Hughes is fundamentally unsuitable for producing a pulse of light for use in cosmetic or therapeutic photo treatment because the pulse of light in Hughes is contained within a laser amplification device from which the light output is the amplified laser beam and not the pulse of light produced by the flash tube 6. In Hughes a laser beam is shone into the device at 1 and exits the device at 1'. All of the light produced by the flash lamp is contained with the device and does not exit from it. For that reason, it is impossible

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that Hughes could function in a manner as does the Applicants' invention. The function of the flash lamp is only to stimulate the lasing material within the lasing amplifier.

Claims 19-26 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Fletcher(U.S. Patent 4,603,422). The Applicants respectfully traverse the rejection.

Fletcher is equally irrelevant to the invention as now claimed. Fletcher does not disclose an apparatus for producing a pulse of light for use in cosmetic or therapeutic photo treatment of the human or animal body. The pulse light output of the flash lamp in Fletcher similarly is not the output of the Fletcher's device as a whole. Rather, the output of the flash lamp of Fletcher is used for stimulating laser output and, for that reason, the output of the flash lamp could not be directed to a body for photo treatment, as required by the Applicants' invention.

In view of the above amendments to the claims and the foregoing remarks, the Applicants respectfully assert that all of the Examiner's objections and rejections have been overcome. Accordingly, early and favorable notice of allowance of the present application is respectfully requested.

Respectfully submitted,

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